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Message to Energy Managers

Marine Corps Recruit Depot San Diego had an ambitious goal of running 100% of its fleet vehicles on alternative fuel. They started by converting conventional gasoline vehicles to compressed natural gas (CNG). Recently all of their dedicated CNG and bifuel (CNG or gasoline) vehicles are produced by major auto manufacturers. They hope to run all of the fleet vehicles on some form of alternative fuel by the end of 2003.

And speaking of ambitious, the United States Marine Corps met 182% of its Alternative Fuel Vehicles (AFV) acquisitions last year. The Energy Policy Act of 1992 requires that 75% of all covered light-duty vehicles acquired for Federal fleets from FY99 on be AFV. The Marine Corps estimates that it has reduced petroleum consumption by 24% compared to the FY99 baseline, exceeding the Executive Order 13149 20% reduction goal for FY05 three years ahead of schedule.

If you're thinking about purchasing or leasing AFV or Advance Technology Vehicles such as hybrid-electric vehicles, but want to learn more about performance, check out the Advanced Vehicle Testing Activity website. See page four for more information.

Bill Tayler

William F. Tayler
Manager Utilities/Energy

For MCRD San Diego, the Future is Now!

Vince Sablan, Fleet Manager, SW Region Fleet Transportation, Marine Corps Recruit Depot (MCRD) San Diego, began thinking about EPAct and executive orders governing reducing petroleum consumption and cleaning the air about 8 years ago.

He decided then that his goal would be to make 100% of his fleet vehicles run on some type of alternative fuel, but he had no idea how long it would take him to reach this goal. He began by converting conventional gasoline vehicles to compressed natural gas (CNG). More recently, all of his dedicated CNG and bifuel (which run on CNG or gasoline) vehicles are produced by the major auto manufacturers. These have fewer problems than the earlier conversions. Three years ago the first fast-fill CNG station was installed onsite to fuel both 3,000 psi and 3,600 psi CNG systems. Then, about 2½ years ago, the Commanding General, Major General Jan Huly, told him that he wanted to make the Recruit Depot the number one environmentally friendly base in the DoD and asked him how he could do this. Vince suggested replacing the fleet petroleum vehicles with alternative fuel vehicles (AFV). Major General Huly gave his go ahead, pledging his support. Vince hopes

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MCRD San Diego's dedicated CNG bus fleet: four 45-passenger buses and two 52-passenger buses

DON Energy Awareness Website: Access the tools on the Navy Energy website for ideas, planning tips, and tools. Set your browser to <**http://energy.navy.mil**> and scroll down the left-hand column to the Awareness pick.

GREENGUARD™ Environmental Institute

Concerned with your project's indoor air quality, or interested in getting your building LEED certification? Then check out the GREENGUARD™ Environmental Institute, a global, independent Washington, D.C.-based, nonprofit organization that establishes environmental standards for indoor products and building materials. GREENGUARD™ has a scientific, third party board made up of members who are world-renowned for their expertise in chemical emissions testing, indoor air quality, and public health.

The GREENGUARD™ Certification program is an indoor air quality resource that identifies specific products that have been tested and continue to be tested to ensure that their chemical and particle emissions meet acceptable indoor air quality pollutant guidelines and standards. This Certification program is a valuable tool for architects, designers, product specifiers, and purchasing organizations that want to locate, specify, and purchase low-emitting products for indoor environments. According to GREENGUARD™, their certification and labeling program for interior products and building materials is the only testing program worldwide for low-emitting products. The GREENGUARD™ Environmental Institute oversees the certification process, including all audits and qualifying criteria for each product category.

The GREENGUARD™ Certification program includes all construction materials, furnishings, furniture, office equipment, cleaning and maintenance materials, and processes that are used in interior environments.

Construction materials, furnishings, and office furniture must meet the low pollutant requirements of the State of Washington's Indoor Air Quality program, OSHA's Formaldehyde Rule, USEPA's office furniture specifications, the USEPA's National Ambient Air Quality Standard, and one tenth of all regulated chemical exposure limits established by OSHA. Controlled pollutants include VOCs, respirable particles, formaldehyde, total aldehydes, ozone, and carbon monoxide. Specific chemicals, which are known irritants, odorants, or carcinogens must meet certain criteria for some products. For example, office equipment and insulation must meet established criteria for styrene and trimethylamine.

Office equipment and certain processes, in addition to the above criteria, must also meet the pollutant requirements of Germany's Blue Angel Program for styrene, particles, and ozone.

In general, all products found to meet the GREENGUARD™ Certification standards will contribute very low levels of pollutants to the indoor environment. These standards are subject to change in the future to accommodate changes in international, Federal, and state regulations.

The GREENGUARD™ Product Guide is the environmental resource guide for selecting and locating environmentally preferred, low-emitting products for the indoor environment. Access to this guide is provided free of charge through a registration process. The Guide will be updated on the Web page, as new product listings become available.

For more information, log onto their website at www.greenguard.org, or contact GREENGUARD at 1-800-427-9681, or by e-mail at info@greenguard.org.

MCRD San Diego, continued from page 1

to have all of the fleet vehicles running on some form of alternative fuel by the end of this (2003) calendar year.

Although EPAct exempts certain vehicles, such as police vehicles, the base is nonetheless committed to eventually replacing all of these with AFV. All military police (MP) vehicles will be replaced with CNG Ford Crown Victorias. One MP SUV will be replaced perhaps by an AFV pickup truck. Two MP vans will be replaced by nine Global Electric Motorcars (GEM) Neighborhood Electric Vehicles with fast chargers. The nine GEM are already procured, and the base is having them equipped with MP packages; the MP-modified GEM should be ready by next month. The use of the GEM will be extensively studied as part of a DOE test program, which has already installed the fast charger at the MP building.

The Recruit Depot also hopes to receive fuel cell vehicles for testing and a tube trailer portable hydrogen refueling station.

For more information, contact Vince Sablan at 619-524-4229 or via e-mail at sablanvt@mcrdsd.usmc.mil.

MCRD San Diego's 1-½ ton trucks were modified to operate on either bi-fuel gas/CNG, with CNG as the main fuel. The 3-ton truck was a diesel truck modified to a dedicated CNG truck.

Always Give 100%? No Way—USMC Insists on 182%!

At one time or another you've probably been told to always give 100%. Apparently the United States Marine Corps (USMC) has not heard this, or disregards this advice, when it comes to its Alternative Fuel Vehicle (AFV) acquisitions. Last year, USMC did not (only) meet 100% of its AFV acquisition requirements—USMC met 182% of its requirements!

The Energy Policy Act of 1992 (EPAct) requires that 75% of all covered light-duty vehicles acquired for Federal fleets in FY99 and beyond be AFV. All Federal fleets with 20 or more vehicles that are capable of being centrally fueled, and are operated in a metropolitan statistical area (with a population of more than 250,000 based on the 1980 census), must comply. Certain emergency, law enforcement, and national defense vehicles are exempt. The Energy Conservation and Reauthorization Act of 1998 amended EPAct to allow one AFV acquisition credit for every 450 gallons of pure biodiesel fuel consumed in vehicles over 8,500 pounds gross vehicle weight rating. "Biodiesel credits" may fulfill up to 50% of an agency's EPAct requirements. Additional credits are given for dedicated AFV, that is, that only operate on alternative fuels.

In FY02 the USMC acquired 1,897 light-duty vehicles, of which 512 were AFV. Only 473 of the acquired vehicles were covered under EPAct since 1,424 vehicles were exempt: 29 were law enforcement vehicles and most of the others were assigned to fleets of less than 20 vehicles and are not centrally fueled. In addition to acquiring more than it was required, the USMC gained an additional 221 credits by acquiring dedicated light-, medium-, and heavy-duty AFV, and 129 credits by utilizing bio-diesel, giving them a total of 862 credits. This exceeded EPAct requirements by 82%!

Planning estimates indicate a similar level of compliance for FY03 and FY04 with acquisition credits of 411 and 955 AFV credits, respectively.

The USMC uses biodiesel in all its commercial non-tactical diesel vehicles—whether it owns them or leases them from GSA—throughout all CONUS USMC bases where it is economically feasible to do so. The USMC has a Memorandum of Understanding with GSA stating that USMC will pay for any maintenance problem caused by biodiesel fuel use. To date, there have been no problems with using biodiesel in diesel vehicles that would require USMC to pay GSA.

The USMC continues to concentrate its CNG vehicles where CNG infrastructure is already established. Neighborhood Electric Vehicles (NEV) have been successfully used at several locations for light hauling and administrative purposes. USMC installations are finding unique ways to utilize NEV and reduce the number of gasoline vehicles. In 2002, five California installations were the recipients of 115 various NEV models.

In 2003, several installations will be provided with above-ground E-85 tanks. Camp Lejeune has been selected to receive a $25,000 DoD grant to place an E-85 fuel site on base.

The USMC estimates that it has reduced petroleum consumption by 24.5% compared to the FY99 baseline, exceeding Executive Order 13149 20% reduction goal for FY05 3 years ahead of schedule.

AUTEC on Andros Island has four Tiger Truck battery electric vehicles in its ground fleet. This one is used by the Carpenter Shop.

DOE Fuel Cell Demonstration Solicitation

DOE intends to provide financial support to 5-year hydrogen fuel cell demonstration projects and has issued a Controlled Hydrogen Fleet and Infrastructure Demonstration and Validation Project solicitation. Teams must include an automobile manufacturer and an energy company. Although the due date is listed as September 15, 2003, this large solicitation may be extended. For the solicitation, and a list of attendees of a March pre-solicitation meeting who you may wish to contact to express interest in participating in the demonstration, check out the DOE Web site:
http://www.eere.energy.gov/hydrogenandfuelcells/2003_solicitation_notice.html

Energy Awareness Week:

Oct. 27-31, 2003

Check It Out

DOE's Advanced Vehicle Testing Activity

Contemplating the purchase or lease of alternative fuel vehicles (AFV) or advanced technology vehicles (ATV) such as hybrid-electric vehicles (HEV), but are hesitating because you do not know how well the vehicles perform? Check out the Advanced Vehicle Testing Activity (AVTA) managed by DOE's FreedomCAR and Vehicle Technologies program at http://avt.inel.gov. ATVA works with commercial and government fleets and industry groups to support the testing and deployment of alternative fuel vehicles and advanced technology vehicles. Vehicle testing procedures have been developed with stakeholders to measure real-world performance. Information resources are available to support the decisions fleets must make when considering AFV and ATV. Data are compiled into an easy-to-understand format that helps you compare the performance of vehicles.

Do you wonder what the real-world fuel economy is of the HEV? AVTA reports, as part of the Toyota Prius Fleet and Accelerated Reliability Testing, that six Prius HEV operating in two fleets in Arizona were driven more than 230,000 miles as of February 2003 and achieved 41.9 miles/gallon in cumulative average fuel economy.

Or how about Neighborhood Electric Vehicles? The report, Field Operations Program Neighborhood Electric Vehicle Fleet Use (http://avt.inel.gov/nev/NEV01-00864-new.pdf), describes results on fleet use, including 35 GEMs operated at MCAS Yuma, AZ. Light-, medium-, and heavy-duty vehicles are covered. Technologies range from electric, hybrid-electric, alternative fuels, and even hydrogen. Check it out!

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Watts News?

We want to hear from you.

Tell us about the energy initiatives you're working on, the problems you encounter, and the solutions you discover.

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Dean Ryan Consultants & Designers, Inc.
1733 King Street, Third Floor
Alexandria, VA 22314
Phone: (703)548-8115
Fax: 703.548-6855
e-mail: sarahb@deanryan.com

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Department of the Navy
Commanding Officer
NFESC
Code: ESC 22
1100 23rd Avenue
Port Hueneme, CA 93043-4370